62D CONGRESS, 3d Session. } HOUSE OF REPRESENTATIVES. { DOCUMENT No. 1336.

13

VERMILION RIVER, LA., AND CHANNEL TO CONNECT WITH INLAND WATERWAY.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING,

WITH A LETTER FROM THE CHIEF OF ENGINEERS, REPORTS ON PRELIMINARY EXAMINATION AND PLAN AND ESTIMATE OF COST OF IMPROVEMENT OF VERMILION RIVER, LA., AND CHANNEL TO CONNECT VERMILION RIVER WITH THE INLAND WATERWAY BETWEEN FRANKLIN AND MERMENTAU AT SCHOONER BAYOU.

FEBRUARY 3, 1913.—Referred to the Committee on Rivers and Harbors and ordered to be printed, with illustrations.

WAR DEPARTMENT,
Washington, February 3, 1913.

SIR: I have the honor to transmit herewith a letter from the Chief of Engineers, United States Army, dated 1st instant, together with copies of reports from Maj. Edward H. Schulz, Corps of Engineers, dated December 10, 1912, and January 18, 1913, on preliminary examination, with maps, and estimate of cost of improvement, respectively, of Vermilion River, La., and channel to connect Vermilion River with the inland waterway between Franklin and Mermentau at Schooner Bayou, made by him in compliance with the provisions of the river and harbor act approved July 25, 1912.

Very respectfully,

HENRY L. STIMSON,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, February 1, 1913.

From: The Chief of Engineers.
To: The Secretary of War.
Subject: Preliminary examination and estimate of cost of improvement of Vermilion River, La., and channel to connect with inland waterway.

1. There are submitted herewith, for transmission to Congress, reports dated December 10, 1912, and January 18, 1913, by Maj. Edward H. Schulz, Corps of Engineers, on preliminary examination, with maps, and estimate of cost, of improvement, respectively, of Vermilion River, La., and channel to connect Vermilion River with the inland waterway between Franklin and Mermentau at Schooner Bayou, called for by the river and harbor act approved July 25, 1912.

2. The existing project for improvement of the channel, bay, and passes of Vermilion River, or Bayou Vermilion, provides for a channel 5½ feet deep at low water (mean low Gulf level) from the mouth to the railroad bridge just below Lafayette, by removing obstructions and by dredging through the shoals. Under this project a channel of 6 feet depth was dredged through the bar in 1910, but this channel shoaled rapidly, so that the present depth is not more than 3 to 3½ feet. The district officer reports that about 95 per cent of the commerce that uses Bayou Vermilion comes from the west through Mermentau River and the inland waterway to the mouth of Schooner Bayou, then crosses the open waters of Vermilion Bay and enters the mouth of Bayou Vermilion. The danger of the open waters and the shallowness of the water in West Vermilion Bay have rendered unprofitable previous attempts to run boats from New Orleans to Abbeville, and it appears that local commerce is greatly reduced and hampered by the unsatisfactory navigation conditions.

3. The adopted project for the inland waterway from Franklin to Mermentau provides for a depth of 5 feet. On account of the exposure, shallow water, and unfavorable experience in maintaining a channel in Vermilion Bay, a change of route of this waterway to the north of the bay is under consideration, and if adopted would form a logical easterly extension of the cut now proposed to connect Schooner Bayou and Vermilion River. The district officer states that this cut appears to be one of the most important portions of the entire intracoastal waterway, and he recommends that it be dredged by the United States on the route A–B′, indicated on the accompanying map, to a depth of 5 feet below mean Gulf level and a bottom width of 40 feet, at an estimated cost of $37,500, provided that the necessary right of way, 300 feet wide, be donated to the United States free of cost. The division engineer concurs in the views of the district officer.

4. These reports have been referred, as required by law, to the Board of Engineers for Rivers and Harbors, and attention is invited to the board's accompanying report of January 27, 1913, concurring with the views of the district officer and the division engineer.

5. After due consideration of the above-mentioned reports, I concur in general with the views of the district officer, the division engineer, and the Board of Engineers for Rivers and Harbors, and, therefore, in carrying out the instructions of Congress, I report as

follows: That the improvement by the United States of Vermilion River, La., and channel to connect Vermilion River with the inland waterway between Franklin and Mermentau at Schooner Bayou is deemed advisable so far as to secure a channel depth of 5 feet and a channel width of 40 feet, increased at entrances and on curves, and subject to the condition specified by him, at an estimated cost of $37,500 for first construction, and $1,800 annually for maintenance, these estimates being based on the supposition that the construction work will, as now seems desirable and advantageous, be prosecuted under a first appropriation of the full amount of the estimate.

W. H. Bixby,
Chief of Engineers, U. S. Army.

REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS ON PLAN AND ESTIMATE OF COST OF IMPROVEMENT.

[Third indorsement.]

Board of Engineers for Rivers and Harbors,
January 27, 1913.

To the Chief of Engineers, United States Army:

1. Vermilion River or Bayou is under improvement by the United States, the present project providing for the removal of snags and overhanging trees to the head of navigation at Lafayette, 52 miles, and dredging at the mouth in Vermilion Bay.

2. The depth in the river is about 4 feet to 20 feet at low water, there being a good navigable depth below Abbeville, 22 miles, except on the bar at the mouth, where the depth is but 3 to $3\frac{1}{2}$ feet, although a channel 6 feet in depth was dredged through this bar in 1910.

3. The commerce of the river for 1911 is reported to be 29,151 tons of a miscellaneous character. About 95 per cent of this commerce comes from the west through the inland waterway and Schooner Bayou, and then crosses the open waters of Vermilion Bay to the mouth of the river. This crossing is hazardous on account of exposure and shallow water, and the necessity of making it retards the development of commerce between the Vermilion and the country to the west.

4. The improvement contemplated is a cut or canal, similar in dimensions to the connecting inland waterway, from a point on Vermilion River about $1\frac{3}{4}$ miles above its mouth to Schooner Bayou. The present available route for the inland waterway east of Schooner Bayou is through Vermilion Bay. On account of the exposure, shallow water, and unfavorable experience in maintaining a channel in the bay, a change of route to the north of the bay is under consideration, and if adopted would form a logical extension of the cut now proposed to connect Schooner Bayou and Vermilion River.

5. The district officer presents alternate estimates for routes A–B and A–B′, as shown on the map accompanying, for channels 5 feet deep at mean low Gulf level and 40 feet bottom width, the amounts being $33,000 and $37,500, respectively. The estimate for maintenance of either route is $1,800. As the route A–B′ will eliminate a bad bend in Vermilion River, and for other reasons given, the district

officer recommends that route, with the proviso that the right of way 300 feet wide be donated to the United States free of cost. The division engineer concurs in the views of the district officer.

6. It appears that the cut or canal proposed by the district officer will afford a safer and more reliable channel than the present exposed route, that it would give confidence to navigation interests, and would stimulate and encourage the development of commerce through the connecting inland waterway. For these reasons the board believes the improvement desirable, and it reports that in its opinion it is advisable for the United States to undertake the work in accordance with the estimate for route A–B′ at a cost of $37,500 for first construction and $1,800 thereafter for maintenance, provided the necessary right of way is furnished without cost to the United States. The initial appropriation should cover the whole amount of the estimate.

7. In compliance with law, the board reports that there are no questions of terminal facilities, water power, or other subjects so related to the project proposed that they may be coordinated therewith to lessen the cost and compensate the Government for expenditures made in the interest of navigation.

For the board:

WM. T. ROSSELL,
Colonel, Corps of Engineers,
Senior Member of the Board.

PRELIMINARY EXAMINATION OF VERMILION RIVER, LA., AND CHANNEL TO CONNECT WITH INLAND WATERWAY.

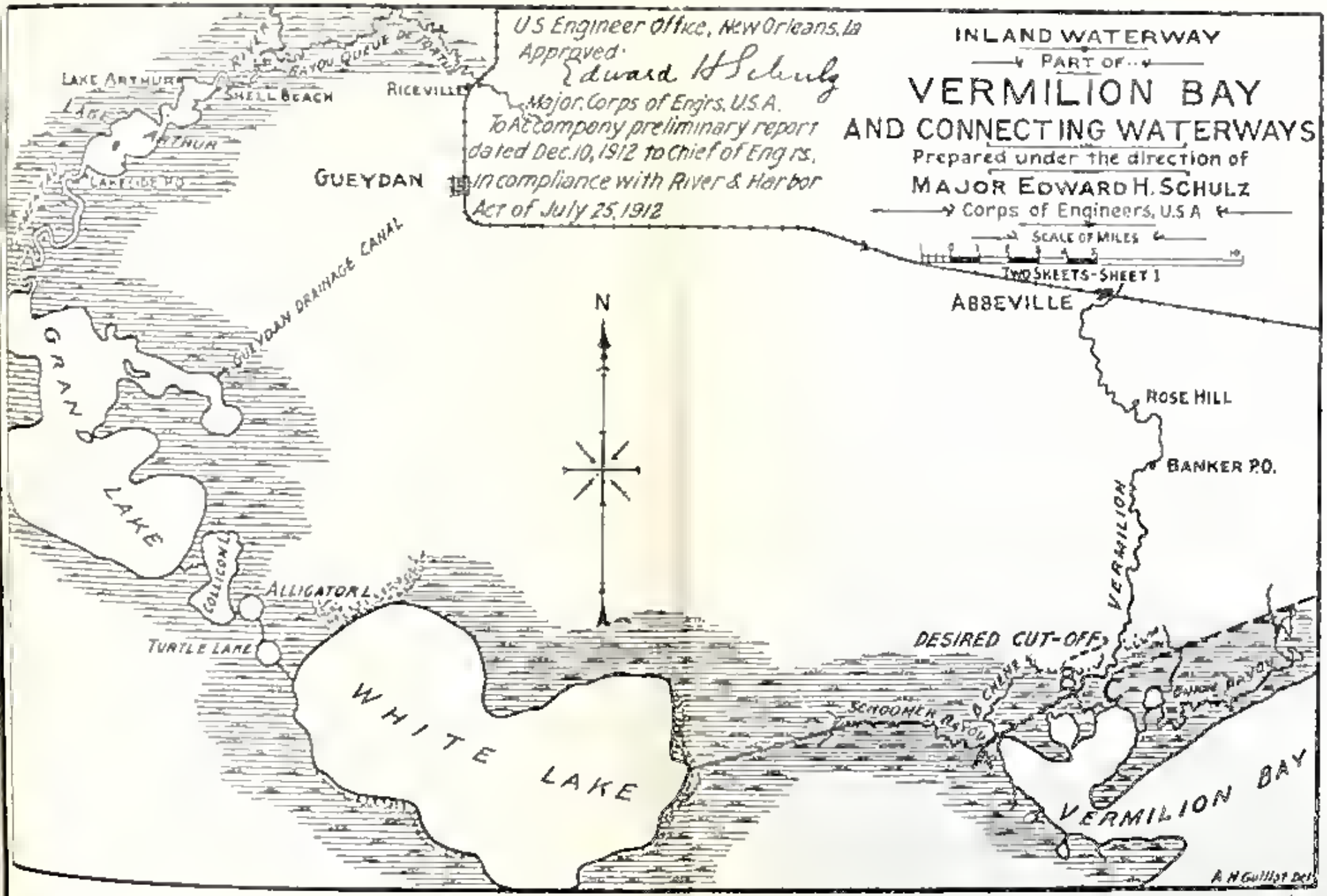
WAR DEPARTMENT,
UNITED STATES ENGINEER OFFICE,
New Orleans, La., December 10, 1912.

From: District engineer officer.
To: Chief of Engineers, United States Army (through Division Engineer, Gulf Division).
Subject: Preliminary examination of Vermilion River and channel to connect with inland waterway.

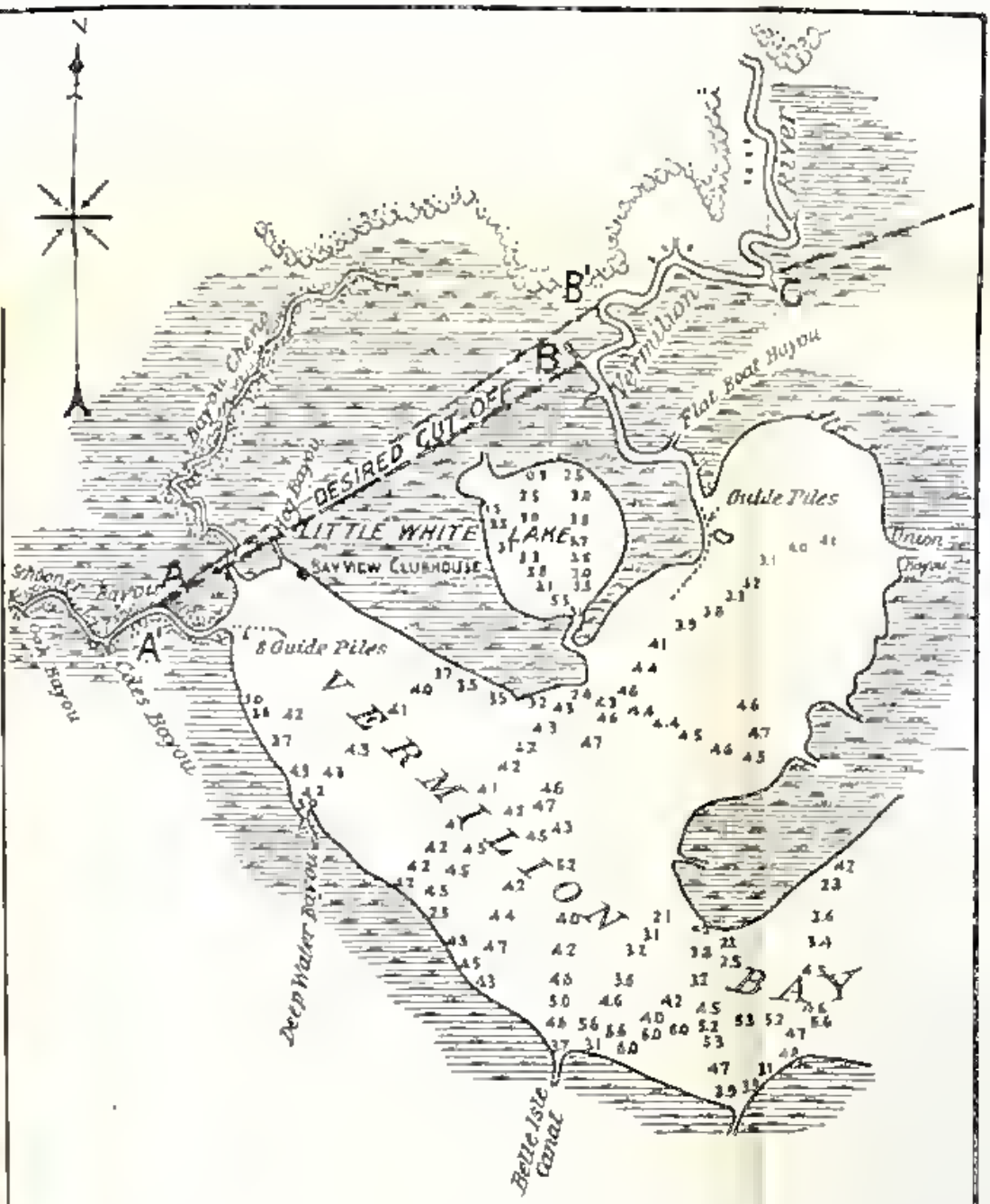
1. The following report on preliminary examination of Vermilion River, La., and channel to connect Vermilion River with the inland waterway between Franklin and Mermentau at Schooner Bayou is submitted under the provisions of the river and harbor act of July 25, 1912, and in compliance with department instructions of August 3, 1912. An examination was made on September 19–20, 1912.

2. Two maps are submitted herewith. Sheet 1 shows the general location of Vermilion River from Abbeville to the bay and its relation to the inland waterway. Sheet 2 shows the mouth of Vermilion Bayou and the bay more in detail.

3. Bayou Vermilion, or Vermilion River, is the first stream in southern Louisiana west of and not connected with the Atchafalaya River. It starts from the junction of Bayou Barbeux and Bayou Fusilier, and by the Fusilier it is connected with the Teche. The river flows through a slightly rolling prairie country. It is considered navigable to Lafayette, 52 miles above its mouth, where it is crossed by the fixed bridge of the Morgan's Louisiana & Texas Railroad.



Vermilion Bay & Connecting Waterways



INLAND WATERWAY

WESTERN PART OF

VERMILION BAY

Prepared under the direction of

MAJOR EDWARD H. SCHULZ

Corps of Engineers, U.S.A.

SCALE OF MILES

TWO SHEETS - SHEET 2

A.H.G

U.S. Engineer Office, New Orleans, La.
Approved Edward H. Schulz
Major, Corps of Engineers, U.S.A.

To accompany preliminary report dated Dec 10, 1912, to the Chief of Engrs. in compliance with River & Harbor Act of July 25, 1912.

Reduced from Survey of 1909

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Three miles below is the Pin Hook Bridge (wagon drawbridge). At Abbeville, 22 miles above its mouth, is a railroad bridge with draw. The banks for 45 miles below Lafayette are of red, clayey soil, above all overflow, except strips of marsh occasionally found from 50 to 100 feet in width. Trees grow upon the banks for a width of about a hundred feet and are the only timber near. The remaining 7 miles to the mouth is sea marsh, covered at high tides. The width of the bayou varies from 50 to 400 feet, and the depth from 4 to 20 feet at low water, there being ample water below Abbeville except at the bar. The river empties into the western end of Vermilion Bay through two outlets, known as "The Passes," one of which (the eastern) has in former years been partly closed by a brush jetty. The usual variation of the tide at the mouth is about 1 foot. There is, however, a variation as much as 2 feet above and below mean water due to wind. A depth of about 2 feet existed over the bar before improvement.

4. The river is now under improvement according to the project adopted in 1880, which was modified in 1892. The present operations consist in removal of snags and overhanging trees to the head of navigation at Lafayette and dredging at the mouth. In 1910 a channel of 6 feet depth was dredged through this bar and marked with piles. This channel, however, shoals very rapidly, so that the present depth is not more than 3 to $3\frac{1}{2}$ feet.

5. *Previous examinations.*—Previous reports and examinations of Bayou Vermilion will be found as follows:

Annual report of Chief of Engineers, United States Army, for 1880, page 1164: This report contains the first project under which work was done, as outlined above. The work consisted of snagging. dredging, and jetty construction, at a total estimate of $9,900.

Annual report of Chief of Engineers, United States Army, for 1887, page 1398: Estimates cost of additional improvement from Abbeville to the Morgan's Louisiana & Texas Railroad bridge at Lafayette. Report unfavorable.

Annual report of Chief of Engineers, United States Army, for 1891, page 1855: Provides for depth of $5\frac{1}{2}$ feet to Lafayette (Pin Hook Bridge), at a cost of $25,000. This is the modification of project referred to above.

House Document No. 1218, Sixtieth Congress, second session, report of August 10, 1908: Contains project for affording $5\frac{1}{2}$ feet draft to Abbeville and 3 feet draft to Lafayette, at a cost of $22,660, and annual maintenance of $3,000. Congress has so far taken no action on this report.

6. *Commerce.*—The commerce on Bayou Vermilion for the year 1911 was 29,151 tons, which has been about the average for the last 10 years. The details of the 1911 commerce are as follows:

Vessel classification.

Classes.	Number.	Net registered tonnage.
AMERICAN.		
Registered:		
Steamers	2	11,460
Gas boats	5	3,320
Sailing	3	1,500
Unregistered:		
Gas boats	41	.....
Sailing	7	.....
Unrigged (barges)	14	.....
Total	72	16,280

Freight traffic.

Articles.	Customary units.		Amount in short tons.	Valuation.	Average haul distance freight was carried.	Ton-mile statistics.	Rate per ton-mile.
	Amount.	Unit.					
Cane	24,000	Tons	24,000	$108,000	25	600,000	$0.012
Rice	800	Sacks	80	3,200	30	2,400	.05
Cotton	1,100	Bales	275	55,000	25	6,875	.104
Cotton seed	1,100	Sacks	33	990	25	725	.073
Sugar	600	Barrels	120	12,000	25	3,000	.05
Molasses	100	do	25	1,000	25	625	.08
Wood	200	Cords	200	800	25	5,000	.016
Live stock	500	Head	150	10,000	50	7,500	.069
Hides and furs	3,200	.....	65	14,375	60	3,900	.....
Moss	40	Bales	6	240	30	180	.05
Poultry and eggs	9	Tons	9	2,750	25	225	.18
Sand and shells	190	do	190	380	50	9,500	.035
Brick	80,000	.....	180	720	25	4,500	.035
Lime and cement	275	Barrels	35	387	25	925	.080
Fuel oil	13,615	do	2,110	14,770	20	42,200	.032
Refined oil	100	do	20	400	25	500	.096
Lumber	250,000	Feet	500	5,000	25	12,500	.04
Shingles	90,000	.....	18	450	25	450	.08
Coal	450	Tons	450	2,700	60	27,000	.026
Fertilizers	100	do	100	3,400	10	1,000	.10
Manufactured iron and steel	30	do	30	3,000	15	450	.266
Feed, ground	500	Sacks	13	1,350	25	325	.08
Oysters	400	Barrels	20	500	60	1,200	.133
Potatoes	250	do	22	880	25	550	.068
Miscellaneous	500	Tons	500	50,000	25	12,500	.....
Total	.....	.....	29,151	292,292	.....	744,030	.....

7. Mr. D. L. McPherson, of Abbeville, La., who is interested in this improvement, states to this office as follows:

Relative to yours of the 19th referring to improvement of the mouth of the Vermilion River, beg to advise that the proposed short cut would be used entirely by all boats and commerce from the west to the Vermilion River or from the Vermilion River west. None of the western traffic would use the Vermilion Bay to reach the Vermilion River if the cut-off was made. At present the inadequate depth of the water in the Vermilion Bay from the mouth of the Vermilion River to Schooner Bayou deters the larger boats in the trade west of the Vermilion from extending their operation to the Vermilion River. During the fall and winter months none but very shallow draft boats can cross the western arm of the Vermilion Bay from the mouth of the Vermilion River to Schooner Bayou. At present several boats that were in the trade regularly between Grand Chienier, Leesburg, Lake Arthur, Lake Charles, and Pecan Island to Abbeville through the intercoastal canal have been forced to discontinue their trips on account of insufficient water depth in the Vermilion Bay to navigate. Without the cut-off connecting the Vermilion River with Schooner Bayou the intercoastal canal west is practically useless. To attempt to

open and keep open a channel through the Vermilion Bay from the Vermilion to Schooner Bayou would cost several times more than the cost of cutting the short cut connecting the two waterways.

I should say that from 50 to 75 boats pass in and out of the Vermilion River and through the intercoastal canal at present, some carrying freight, others pleasure craft. I am unable to state the number that would use the intercoastal were sufficient water provided from the west that they could reach the Vermilion at all times. The water depth is so inadequate across the Vermilion Bay that the Post Office Department directs the mail from Pecan Island carried to Lake Arthur, La., in Calcasieu Parish, a longer haul, rather than risk having the mails tied up by low water in the Vermilion Bay.

8. About 95 per cent of the commerce that uses Bayou Vermilion comes from the west through Mermentau River and inland waterway to the mouth of Schooner Bayou, then crosses the open waters of Vermilion Bay and enters the mouth of Bayou Vermilion. At present and for some years past no freight of any consequence has taken its course to the eastward that originated on the Vermilion. Some 10 years gone by river steamers made trips from New Orleans to Abbeville via Morgan City and across the Atchafalaya, Cote Blanche, and Vermilion Bays, but the route was deemed too hazardous and the traffic was discontinued. The danger of the open waters and the shallowness of the water in West Vermilion Bay rendered these undertakings unprofitable. The fish and oyster industry from Vermilion Bay and the Gulf to Abbeville is about the only commerce that would seek the present mouth of the Vermilion if the cut was made connecting the Vermilion with Schooner Bayou. All other traffic that naturally belongs eastward would remain dormant until the opening of the intercoastal between the Vermilion and the Teche. The cut-off is very much needed to accommodate the traffic now building up to the westward from Pecan Island, Lake Arthur, Leesburg, Lake Charles, and other points. The uncertainty of crossing from the mouth of the Vermilion to the mouth of Schooner Bayou keeps many boats from coming to or leaving Abbeville during the winter season, the heaviest shipping season of the year. There is only 3 to 3½ feet of water in Vermilion Bay, and frequently less. Local commerce is greatly reduced and hampered, and merchants hesitate to ship fragile or perishable freight. It is understood that boats have been grounded for several days and nights, causing great hardship for the boat crew and passengers. Even with all these difficulties, a small cargo of furs from Pecan Island, valued at $1.800, was recently received at Abbeville. From this island, just below White Lake, there was shipped this year about $30 000 worth of furs.

9. As already indicated, the type of improvement desired is an inland canal to connect the mouth of Bayou Vermilion with the mouth of Schooner Bayou (inland waterway), so that the small craft used in this section will not be subjected to the open waters of the bay. It is claimed that if this is done a much cheaper and safer route could be obtained and commerce would increase accordingly.

10. The history of the inland-waterway improvement is as follows:

The act of March 2, 1907, appropriated $89,292 for the inland waterway from Franklin to Mermentau, and the Secretary of War was authorized to enter into contract for additional amount not to exceed $200.000. This canal was to begin at Franklin on the Teche, pass through Cote Blanche and Vermilion Bays, and thence to the Mermentau River.

By act of March 3, 1909, the location of the eastern terminus may be changed as the Secretary of War may select, provided the modification shall not be made unless a valid title to the necessary right of way be secured to the United States free of cost.

By act of February 27, 1911, the Secretary of War was authorized, on the recommendation of the Chief of Engineers, United States Army, to make such changes in the location of said channel as may be considered desirable, provided that no change shall be made unless the necessary right of way is secured to the United States free of cost. It is understood that this clause was intended to make possible the selection of the most advantageous and least costly route between Vermilion Bayou and Bayou Teche, but it is not understood that it was intended to authorize changes involving a considerable excess in cost.

A proposed route north of Vermilion Bay, to avoid the frequent dredging required and the open waters of the bay, has been considered, and, it is understood, favorably reported by a special board of engineers. This route was to enter the Vermilion River from the east near the point marked "C." The route of the special board also included the cut-off A–B, now under consideration. Inasmuch as funds have not been appropriated for the increased expense involved in changing the location, the Chief of Engineers has so far directed that no work be done until further acted upon by Congress.

11. The inland waterway already constructed from Vermilion Bay to Mermentau River under authority of Congress has a width of 40 feet and depth of 5 feet, and if the cut-off now contemplated is adopted it should conform to the same general dimensions. The length, A–B, would be about 3½ miles. In order to avoid a bad bend in the river, the line A–B′ would be more advantageous, but would increase the length and cost about 15 per cent. The country through which the canal will run is low, uninhabited, unimportant marsh, about 1 to 2 feet above mean low water, and the work would consist of dredging along the line indicated.

12. The proposed work being thus through unoccupied land, would serve at present merely as a connecting link, and therefore the question of terminal or transfer facilities and wharves is not specially applicable. The facilities at Abbeville and other terminals along the Vermilion consist of pile wharves, loading by hand or crane. At various places landings are made on the banks themselves.

13. There are no features of water power involved.

The question of drainage is not now important, though possibly in the future the marsh lying near the proposed canal will be reclaimed.

It does not seem necessary to hold a public hearing.

14. This cut-off, or canal, appears to be one of the most important portions of the entire intercoastal waterway. As a part of a wholly inland waterway connecting the Mississippi River with the Sabine River, avoiding entirely the shallow lakes and open bays, the construction of this section is warranted and recommended. Considered as a canal to connect the mouth of Bayou Vermilion with the mouth of Schooner Bayou, it also has the same advantage in avoiding the open waters and shallow bays, and is recommended. The necessary right of way, 300 feet in width, should be donated to the United States, and has been promised, and is now being secured by the local interests.

It is believed the locality is worthy of improvement, and a report and estimate of cost of dredging the canal A–B or A–B′ can be submitted from data on hand. No further funds are required.

EDWARD H. SCHULZ,
Major, Corps of Engineers.

[First indorsement.]

OFFICE OF DIVISION ENGINEER, GULF DIVISION,
Baltimore, Md., December 18, 1912.

To the CHIEF OF ENGINEERS.

Forwarded, concurring in the opinion of the district officer that the channel or cut-off from Schooner Bayou to Vermilion River is worthy of construction by the United States, and, owing to conditions prevailing at the locality and the benefits which will result, it is believed that the work should be done at as early a date as possible.

LANSING H. BEACH,
Lieut. Col., Corps of Engineers,
Division Engineer.

[Third indorsement.]

BOARD OF ENGINEERS FOR RIVERS AND HARBORS,
January 6, 1913.

To the CHIEF OF ENGINEERS, UNITED STATES ARMY.

1. For reasons stated herein, the board concurs with the district officer and the division engineer in recommending the authorization of an estimate in order to determine the extent and advisability of the improvement.

For the board.

WM. T. ROSSELL,
Colonel, Corps of Engineers,
Senior Member of the Board.

REPORT ON PLAN AND ESTIMATE OF COST OF IMPROVEMENT OF VERMILION RIVER, LA., AND CHANNEL TO CONNECT WITH INLAND WATERWAY.

WAR DEPARTMENT,
UNITED STATES ENGINEER OFFICE,
New Orleans, La., January 18, 1913.

From: District engineer officer.
To: Chief of Engineers, United States Army (through division engineer, Gulf division).
Subject: Plan and estimate, channel connect Vermilion River with Schooner Bayou.

1. In compliance with department instructions of January 9, 1913, I have to submit the following plan and estimate of cost for a channel or canal to connect Vermilion River with the inland waterway between Franklin and Mermentau at Schooner Bayou.

2. This report is a continuation of preliminary report made by this office on December 10, 1912, in accordance with the provisions of the river and harbor act of July 25, 1912. No further information

has come to hand as to the commercial or other interests involved, except that the canal is urgently needed to aid existing commerce from Schooner Bayou to Vermilion River. There are several vessels passing daily between the two bod es of water, and they must go by way of Vermilion Bay, involving considerable difficulty and delay.

3. The estimate is based on a survey of the locality already at hand, reference being invited to the two maps accompanying the preliminary report. On sheet 2 of these maps two routes were shown, marked "A–B" and "A–B′," the latter being somewhat longer. The advantage of route A–B′, the more northerly one, is that it will eliminate a bad bend in the Vermilion River. It is further understood that the right of way for this route, A–B′, has been investigated and is now being secured, and will be obtained without difficulty. For these reasons it is believed preferable to take the route A–B′, or, at least, leave the matter so that either route may be adopted, as may finally be most advantageous.

4. The improvement proposed is the dredging of a canal from point A on Schooner Bayou to point B′ on Vermilion River. The approximate length of the canal will be 4 miles. The bottom width will be 40 feet, with side slopes of 1 on 2, and a depth of 5 feet below mean low Gulf level, with an allowable overcut in depth of 1 foot. The right of way, to be donated to the United States free of cost, is to be 300 feet wide. The type of canal and width of right of way now proposed agree with the dimensions already adopted for the inland waterway from the Teche to the Mermentau.

5. The estimate for the line A–B′ is as follows:

250,000 cubic yards, at 15 cents	$37,500

For the line A–B the estimate is—

220,000 cubic yards, at 15 cents	$33,000

The work should be done as one job and in one season, and the initial appropriation should cover the entire estimate for the work. The estimated cost of maintenance is about 5 per cent, or $1,800 per year.

6. The locality is considered worthy of improvement, and it is recommended that the work be done in accordance with the plan and estimate of $37,500, indicated above, with the provisions that the right of way, 300 feet wide, be donated to the United States free of cost.

EDWARD H. SCHULZ,
Major, Corps of Engineers.

[First indorsement.]

OFFICE OF DIVISION ENGINEER, GULF DIVISION,
Baltimore, Md., January 22, 1913.

To the CHIEF OF ENGINEERS.

1. Forwarded, concurring in the opinion of the district engineer that the locality is worthy of improvement by the United States.

LANSING H. BEACH,
Lieut. Col., Corps of Engineers,
Division Engineer.

[For report of the Board of Engineers for Rivers and Harbors on plan and estimate of cost of improvement, see p. 3.]